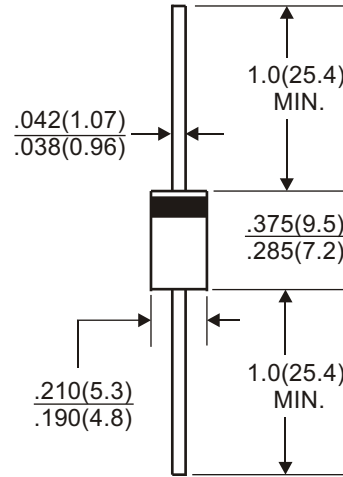


**1500 Watt Peak Power Transient Voltage Suppressors**

Reverse Stand-off Voltage 6.8 to 550 V



DO-201



All dimensions inches and (millimeters)

**Features**

- 1500 watts surge capability at 10/1000 $\mu$ s
- Excellent clamping capability
- Low zener impedance
- Fast response time: typically less than 1.0ps from 0 Volt to 8 Volt min.
- Typical IR less than 1 $\mu$  A above 10 V
- High temperature soldering guaranteed 265 $^{\circ}$ C/10 seconds at 5 lbs (2.3kg) tension

**Mechanical Data**

Case: Molded plastic  
 Terminals: Solder plated solderable per MIL-STD-750, Method 2026  
 Polarity: Color band denoted cathode except Bipolar.  
 Mounting Position: Any  
 Weight: 1.2grams (approx)

**Maximum Ratings & Electrical Characteristics**

Rating at 25 $^{\circ}$ C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz. For Capacitive load derate current by 20%.

Ratings	Symble	Value	Unit
Minimum Peak Power Dissipation at TA = 25 $^{\circ}$ C, TP = 1ms(Note 1)	PPK	1500	W
Steady State Power Dissipation at TL = 75 $^{\circ}$ C Lead Length .375"(9.5mm)(Note 2)	PD	6.5	W
Peak Forward Surge Current at 8.3ms Single Half Sine-Wave superimposed on rated load(JEDEC method)(Note 3)	IFSM	200	A
Operating and Storage Temperature Range	Tj, Ts	-55 to 175	$^{\circ}$ C

**Notes:**

- 1.Non-repetitive current pulse per fig.3 and derated above TA = 25 $^{\circ}$ C per fig.2
- 2.Mounted on copper pad area 1.6"X1.6"(40mmX40mm) per fig.5
- 3.8.3ms single half sine-wave,duty cycle=4pulses per minute maximum.

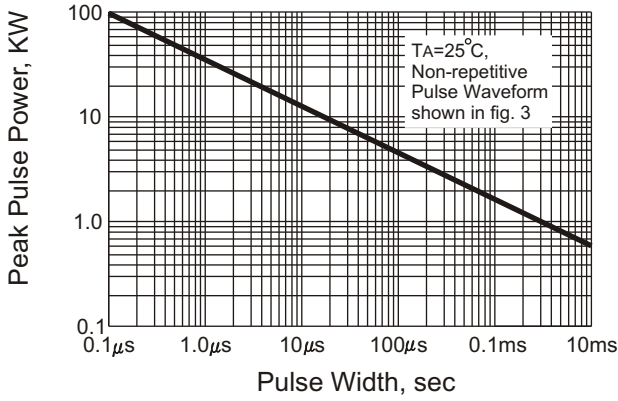
# 1.5KE / 1500 W Axial Lead TVS

Part Number		Reverse Stand-off Voltage V <sub>RWM</sub> (V)	Breakdown Voltage V <sub>BR</sub> (V) Min.@I <sub>T</sub>	Breakdown Voltage V <sub>BR</sub> (V) Max.@I <sub>T</sub>	Test Current I <sub>T</sub> (mA)	Maximum Clamping Voltage @I <sub>PP</sub> V <sub>c</sub> (V)	Peak Pulse Current I <sub>PP</sub> (A)	Reverse Leakage @ V <sub>RWM</sub> I <sub>R</sub> ( $\mu$ A)
UNI-POLAR	BI-POLAR							
1.5KE6.8A	1.5KE6.8CA	5.80	6.45	7.14	10	10.50	144.8	1000
1.5KE7.5A	1.5KE7.5CA	6.40	7.13	7.88	10	11.30	134.5	500
1.5KE8.2A	1.5KE8.2CA	7.02	7.79	8.61	10	12.10	125.6	200
1.5KE9.1A	1.5KE9.1CA	7.78	8.65	9.50	1	13.40	113.4	50
1.5KE10A	1.5KE10CA	8.55	9.50	10.50	1	14.50	104.8	10
1.5KE11A	1.5KE11CA	9.40	10.50	11.60	1	15.60	97.4	5
1.5KE12A	1.5KE12CA	10.20	11.40	12.60	1	16.70	91.0	5
1.5KE13A	1.5KE13CA	11.10	12.40	13.70	1	18.20	83.5	5
1.5KE15A	1.5KE15CA	12.80	14.30	15.80	1	21.20	71.7	5
1.5KE16A	1.5KE16CA	13.60	15.20	16.80	1	22.50	67.6	5
1.5KE18A	1.5KE18CA	15.30	17.10	18.90	1	25.20	60.3	5
1.5KE20A	1.5KE20CA	17.10	19.00	21.00	1	27.70	54.9	5
1.5KE22A	1.5KE22CA	18.80	20.90	23.10	1	30.60	49.7	5
1.5KE24A	1.5KE24CA	20.50	22.80	25.20	1	33.20	45.8	5
1.5KE27A	1.5KE27CA	23.10	25.70	28.40	1	37.50	40.5	5
1.5KE30A	1.5KE30CA	25.60	28.50	31.50	1	41.40	36.7	5
1.5KE33A	1.5KE33CA	28.20	31.40	34.70	1	45.70	33.3	5
1.5KE36A	1.5KE36CA	30.80	34.20	37.80	1	49.90	30.5	5
1.5KE39A	1.5KE39CA	33.30	37.10	41.00	1	53.90	28.2	5
1.5KE43A	1.5KE43CA	36.80	40.90	45.20	1	59.30	25.6	5
1.5KE47A	1.5KE47CA	40.20	44.70	49.40	1	64.80	23.5	5
1.5KE51A	1.5KE51CA	43.60	48.50	53.60	1	70.10	21.7	5
1.5KE56A	1.5KE56CA	47.80	53.20	58.80	1	77.00	19.7	5
1.5KE62A	1.5KE62CA	53.00	58.90	65.10	1	85.00	17.9	5
1.5KE68A	1.5KE68CA	58.10	64.60	71.40	1	92.00	16.5	5
1.5KE75A	1.5KE75CA	64.10	71.30	78.80	1	103.00	14.8	5
1.5KE82A	1.5KE82CA	70.10	77.90	86.10	1	113.00	13.5	5
1.5KE91A	1.5KE91CA	77.80	86.50	95.50	1	125.00	12.2	5
1.5KE100A	1.5KE100CA	85.50	95.00	105.00	1	137.00	11.1	5
1.5KE110A	1.5KE110CA	94.00	105.00	116.00	1	152.00	10.0	5
1.5KE120A	1.5KE120CA	102.00	114.00	126.00	1	165.00	9.2	5
1.5KE130A	1.5KE130CA	111.00	124.00	137.00	1	179.00	8.5	5
1.5KE150A	1.5KE150CA	128.00	143.00	158.00	1	207.00	7.3	5
1.5KE160A	1.5KE160CA	136.00	152.00	168.00	1	219.00	6.9	5
1.5KE170A	1.5KE170CA	145.00	162.00	179.00	1	234.00	6.5	5
1.5KE180A	1.5KE180CA	154.00	171.00	189.00	1	246.00	6.2	5
1.5KE200A	1.5KE200CA	171.00	190.00	210.00	1	274.00	5.5	5
1.5KE220A	1.5KE220CA	185.00	209.00	231.00	1	328.00	4.6	5
1.5KE250A	1.5KE250CA	214.00	237.00	263.00	1	344.00	4.4	5
1.5KE300A	1.5KE300CA	256.00	285.00	315.00	1	414.00	3.7	5
1.5KE350A	1.5KE350CA	300.00	332.00	368.00	1	482.00	3.2	5
1.5KE400A	1.5KE400CA	342.00	380.00	420.00	1	548.00	2.8	5
1.5KE440A	1.5KE440CA	376.00	418.00	462.00	1	602.00	2.5	5
1.5KE480A	1.5KE480CA	408.00	456.00	504.00	1	658.00	2.3	5
1.5KE510A	1.5KE510CA	434.00	485.00	535.00	1	698.00	2.1	5
1.5KE530A	1.5KE530CA	450.00	503.50	556.50	1	725.00	2.1	5
1.5KE540A	1.5KE540CA	459.00	513.00	567.00	1	740.00	2.0	5
1.5KE550A	1.5KE550CA	467.00	522.50	577.50	1	760.00	2.0	5

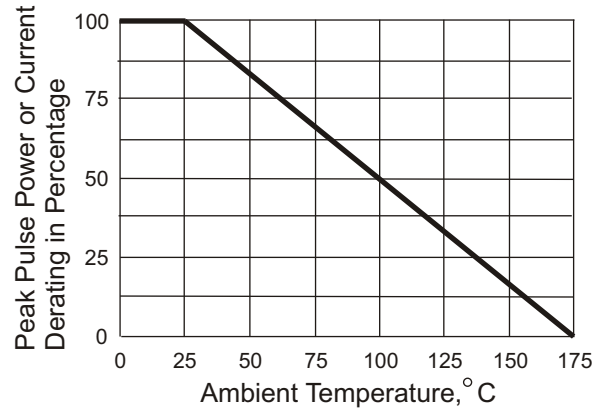
# Rating and Characteristic Curves ( TA=25°C Unless otherwise noted )

## 1.5KE Series

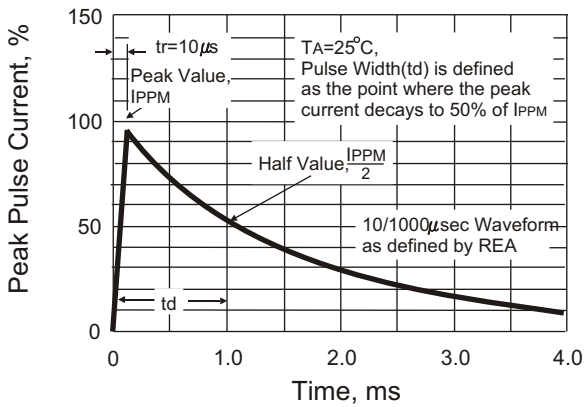
**Fig. 1 Peak Pulse Power Derating Curve**



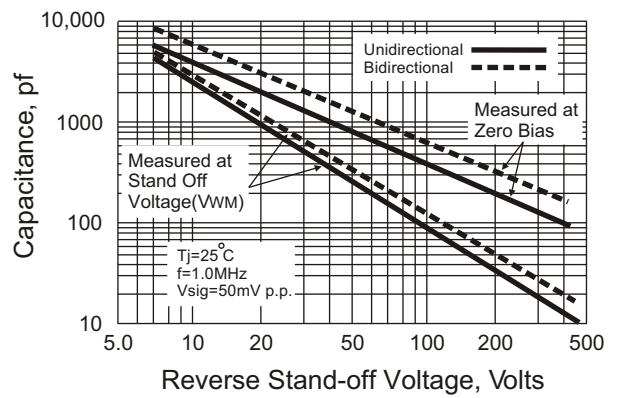
**Fig. 2 Pulse Derating Curve**



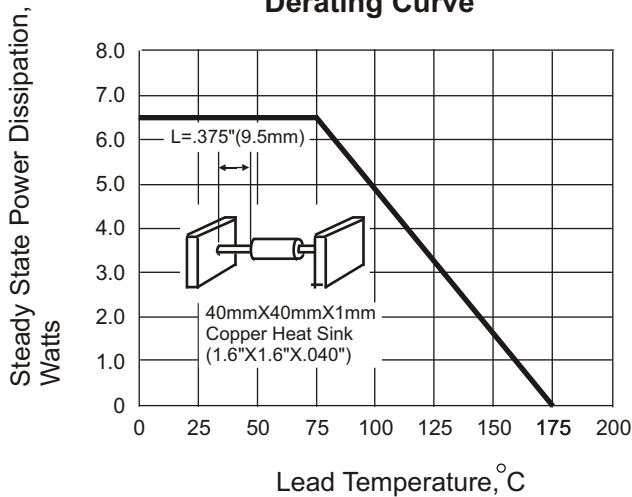
**Fig. 3 Pulse Wave Form**



**Fig. 4 Typical Junction Capacitance**



**Fig. 5 Steady State Power Derating Curve**



**Fig. 6 Maximum Non-repetitive Peak Forward Surge current, unidirectional**

